

CLAIMS

1. System for fastening, by means of welding, a component having a portion with a conical surface profile to a motor vehicle fuel tank comprising an opening, the perimeter of which has a conical surface profile, the welding being carried out between at least one portion of the conical surface of the perimeter of the opening in the tank and at least one portion of the conical surface of the component.
2. Fastening system according to Claim 1, such that the tank and the component are based on one or more plastics.
- 10 3. Fastening system according to the preceding claim, such that at least one of the two components has a multilayer structure that includes a layer made of a barrier material.
- 15 4. Fastening system according to any one of the preceding claims, such that the two components are formed from a multilayer structure and in that, at the point where the first component is fastened to the second component, the number of superposed layers is at most equal to the sum of the number of layers in the first component and the number of layers in the second component.
- 20 5. Fastening system according to the preceding claim, such that the multilayer structure includes at least two layers of high-density polyethylene (HDPE) between which a layer made of an ethylene/vinyl alcohol copolymer (EVOH) is inserted.
6. Fastening system according to any one of the preceding claims, such that the component is chosen from a plate, a delivery tube, a fitting, a spout, a valve or any other accessory of the fuel tank.
- 25 7. Fuel system comprising a fuel tank and at least one accessory fastened to the fuel tank by means of the fastening system described in any one of the preceding claims.
8. Method of manufacturing a fuel system in which :
 1. a tank comprising an opening, the perimeter of which has a conical surface

- 10 -

profile, is manufactured;

2. a component having a part with a conical surface profile is manufactured; and
3. at least one portion of the conical surface of the perimeter of the opening in the tank is welded to at least one portion of the conical surface of the component.

5 9. Method according to the preceding claim, characterized in that the tank and the component are manufactured by moulding by using one or more moulds having impressions corresponding to the conical surfaces.

10 10. Method according to Claim 8 or 9, characterized in that the welding is hot-plate welding using self-centring hot plates or a robotic system optionally controlled by a camera.